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| | | | | ATTORNEY DOCKET NO. |
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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | | GUI-115 |
| 08/662,129 | 06/12/9 | 5 ROSSIN | 5 | 001 110 |

iM51/0605

KREMELAS FOSTER MILLARD & POLLICK

PAPER NUMBER ART UNIT 1754

STRAUB.G

EXAMINER

DATE MAILED:

06/05/98

Please find below and/or attached an Office communication concerning this applicatient or proceeding.

Commissioner of Patents and Trademarks

| | | a,d., | |
|---|--|----------------------------------|---|
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| | | | |
| | Application No. | | |
| Office Action Summary | Examiner | 2129 RC | |
| | S. | TRAUM | Group Art Unit |
| -The MAILING DATE of this communication app | pears on the cover s | sheet beneath the c | orrespondence address- |
| Period for Response | _ | 2 - | |
| A SHORTENED STATUTORY PERIOD FOR RESPONSE IS MAILING DATE OF THIS COMMUNICATION. | S SET TO EXPIRE | тиом | TH(S) FROM THE |
| Extensions of time may be available under the provisions of 37 CF from the mailing date of this communication. If the period for response specified above is less than thirty (30) do it NO period for response is specified above, such period shall, by Failure to respond within the set or extended period for response is specified. | ays, a response within the | e statutory minimum of t | thirty (30) days will be considered g date of this communication. |
| Status | - 1014 | | |
| Responsive to communication(s) filed on 3 / 2 | 24198 | | |
| ☐ This action is FINAL. | | | |
| Since this application is in condition for allowance exceed accordance with the practice under Ex parte Quayle, 1 | ept for formal matters 1935 C.D. 1 1; 453 O | s, prosecution as to .G. 213. | the merits is closed in |
| Disposition of Claims | | | |
| (claim(s) / - 2 C) | | | |
| Of the above claim(s) | | is/are | withdrawn from consideration |
| □ Claim(s) | | | |
| □ Claim(s) / - 2 O | | Is/are | rejected. |
| □ Claim(s)———————————————————————————————————— | | ls/are | objected to. |
| Claim(s) | | are su | bject to restriction or election |
| Application Papers | | . require | ement. |
| ☐ See the attached Notice of Draftsperson's Patent Drav | | | |
| ☐ The proposed drawing correction, filed on | | | d. |
| ☐ The drawing(s) filed on is/are ob | jected to by the Exan | niner. | |
| ☐ The specification is objected to by the Examiner: | | | |
| ☐ The oath or declaration is objected to by the Examiner | r. | | |
| Priority under 35 U.S.C. § 119 (a)-(d) | | | |
| □ Acknowledgment is made of a claim for foreign priority □ Ali □ Some* □ None of the CERTIFIED copies □ received. □ received in Application No. (Series Code/Serial Num | of the priority docum | ents have been | · |
| received in this national stage application from the i | | | .~ |
| *Certified copies not received: | | | · . |
| Attachment(s) | - No/-> | Clatanian C | PTO 440 |
| ☐ Information Disclosure Statement(s), PTO-1449, Paper | | • ' | |
| □ Notice of References Cited, PTO-892 | 040 | | nal Patent Application, PTO- |
| ☐ Notice of Draftsperson's Patent Drawing Review, PTO- | | | |
| Patent and Trademark Office | fice Action Summar | y | |
| | GPO: 1997-417-381/82710 | | Part of Paper No |

Art Unit: 1754

Claims 1-20 are rejected under 35 U.S.C. § 112, first and second paragraphs, as the claimed invention is not described in such full, clear, concise and exact terms as to enable any person skilled in the art to make and use the same, and/or for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A The claims specify the transformation of perfluoroalkanes but do not specify to what they are transformed to. It is noted that transformation includes formation of perfluroalkenes, chlorofluroalkanes as well as the formation of carbon oxides and aluminum fluorides

- B Claims 1-7, 9-14 and 16-20 are not supported by a commensurate enabling disclosure. From review of the examples, none of the catalysts had any activity below about 500°C.
- C Claims 3-5, 9-10 are misleading. It appears that the metals listed are not stabilizing agents but rather are catalytic components, particularly in view of page 1, lines 1-6 which so states.
- D Claims 1- 5, 7-10, 17-20 are not supported by a commensurate enabling disclosure. From review of the specification, an oxidizing agent is required for the instant process to be operative. The is no data set froth that shows that the instant compositions are effective fro the transformation to perfluoroalkanes without the oxidizing agent.
- E It is unclear what is intended by claim 17 and 18. It may be that these claims were intended to require the metals listed, but the term, less that about 50% would also exclude their

Page 2

Art Unit: 1754

use since the term reads on 0%. Further the specification does not support 50% metals. Page 11, lines 1-6 sets forth).01-5% metals.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Page 3

Page 4

Serial Number: 08/662,129

Art Unit: 1754

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

The art area applicable to the instant invention is that of .gas purification and catalysis

One of ordinary skill in this art is considered to have at least a B.S. degree, with additional education in the field and at least 5 years practical experience working in the art; is aware of the state of the art as shown by the references of record, to include those cited by applicant and the examiner (ESSO Research & Engineering V Kahn & Co, 183 USPQ 582 1974) and who is presumed to know something about the art apart from what the references alone teach (In re Bode, 193 USPQ 12, (16) CCPA 1977; and who is motivated by economics to depart from the prior art to reduce costs consistent with the desired product characteristics. (In re Clinton 188 USPQ 365 (367) CCPA 1976 and In re Thompson 192 USPQ 275 (277) CCPA 1976.

Claims 1, 2, 7 and 8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the admitted prior art set forth on page 3 of the specification, to wit, the article by Bond and Sadeghi.

The admitted prior art fairly sets forth the destruction of perhalocarbons by passing them over a catalyst containing high surface alumina as required by these claims. While the

Art Unit: 1754

temperature is not recited, it is clear that the process is conducted at a effective temperature. The instant temperature are not seen to be different either per se or unobviously. In any event it would have been obvious to one of ordinary skill in the art to optimize the temperature.

- Claims 1, 2, 5 and 7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the admitted prior art set forth on page 4, lines 4-25 of the specification, to wit, the Nagata et al Article. Applicant admit that Nagata et al employs a gamma alumina impregnated with vanadium, molybdenum tungsten and platinum to destroy perhalocarbons. With the temperature is not recited, it is clear that a temperature is used. The instant temperatures are not seen to differ either per se or unobviously. In any event, it would have been obvious to one of ordinary skill in the art to optimize the temperature.
- 7 Claims 1-3 and 6-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Okazaki et al.

Okazaki et al fairly sets froth passing perhalocarbons over alumina or alumina stabilized with silica a 350-1000°C or 350-650°C to decompose the perhalocarbons. Flon 14 terafluoromethane is specifically taught. While Okazaki et al does not report good results with Flon 14, it would be expected, inherent and obvious that the same results would be obtained by both applicants and Okazaki et al since the same feed is being contacted with the same materials at the same conditions.

8 Claims 1-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Green et al 5,276,249

Art Unit: 1754

Greene fairly sets froth the decomposition of halogenated organics =, to include perfluorocarbons, column 8, lines 1-12 by contacting them with a catalyst containing the instant metals in the presence of an oxidizing agent at suitable temperature of 100-650°C. Note claim 1. The presence of alumina is claimed. See claims 5 and 8. This instant claims are not seen to

Page 6

- The request for copies of the references cited on pages 1-4 of the specification made in the prior application is repeated. This request was acknowledged on page 4 of the paper filed November 14, 1997. However copies of the references have yet to be made of record.
- 10 No claims are allowed.

distinguish there over, either per se or unobviously.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Gary P. Straub whose telephone number is (703) 308-1094.

Any inquiry of a general nature or regarding the status of this application should be directed to the group receptionist whose telephone number is (703) 308-0662.

Gary P. Straub Primary Examiner Art Unit 1754

Straub/gps June 4, 1998